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REMARKS BY

THE HONOURABLE LARRY GROSSMAN
MINISTER OF INDUSTRY AND TOURISM

AT

HIGH TECHNOLOGY DAY


OTTAWA

OCTOBER 20, 1980



NOTES ONLY

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CANADIANS EVERYWHERE MUST SURELY BE WEARY OF HEARING CERTAIN ECONOMIC COMPLAINTS, SIMPLISTIC SOLUTIONS, FLEETING AND NON-EXISTENT INDUSTRIAL STRATEGIES AND WORRIES ABOUT DE-INDUSTRIALIZATION .

THEY MUST CERTAINLY BE AS TIRED AS I AM OVER ARTICLES, TIME AND MONEY SPENT ON TRYING TO SHORE UP WEAK INDUSTRIES OR STRUGGLING LARGE FIRMS.

BY NOW, EVEN THE MOST UNINFORMED CANADIAN NOT ONLY MUST HAVE HEARD OF CHRYSLER AND MASSEY FERGUSON, BUT ALSO OF OUR POOR PERFORMANCE IN R&D, THE CHALLENGE OF MICROELECTRONICS AND THE "JAPANESE-TYPE" THREAT TO OUR ECONOMIC SECURITY.

BY NOW MOST CANADIANS KNOW WE HAVE TELIDON, DASH-7'S AND CANDUS. BUT MOST CANADIANS FEEL UNSURE THAT WE ARE DOING OUR SHARE OF INNOVATION, RESEARCH, DESIGN, DEVELOPMENT AND ENGINEERING.

THEY FEEL THIS FIRSTLY BECAUSE IT'S BEING STUDIED, ANALYZED, ENUMERATED, STATISTICALLY COMPARED AND WRITTEN ABOUT MORE OFTEN THAN THE WEATHER, THE COMMON COLD OR THE CONSTITUTION.

THEY FEEL THIS SECONDLY BECAUSE -- IT'S TRUE.

ENOUGH. IT'S SURELY TIME FOR ACTION. EACH DAY'S DELAY ALLOWS INDUSTRIES IN JAPAN TO GAIN WEEKS ON US IN NEW TECHNOLOGY AND NEW MARKET PENETRATION.

OUR NEEDS HAVE BEEN IDENTIFIED GENERALLY.

ONE CAN NEVER KNOW OR ANTICIPATE ALL THE SECTORS -- OR AREAS WITHIN SECTORS WHICH ARE "WINNERS." NOR CAN WE ALWAYS GUESS CORRECTLY AS TO HOW WE CAN BEST ASSIST THOSE SECTORS OR SUB-SECTORS.

BUT IN CANADA, WE DO KNOW WE HAVE A MAJOR FOOTHOLD -- PERHAPS POTENTIAL FOOTHOLD -- IN ONE OF THE LEADING (WINNING) INDUSTRIES OF THE 1980'S AND 1990'S: MICROELECTRONICS.

BUT WE MUST MOVE NOW TO REINFORCE THAT SECTOR -- WITH ALL THE TOOLS AT OUR DISPOSAL.

WE MUST DO SO -- CREATIVELY, CAREFULLY AND EFFICIENTLY. ANYTHING LESS IS A LUXURY A COUNTRY LIKE OURS CANNOT AFFORD.

I, TOO, AM WEARY OF THE CONFERENCES AND REPORTS;
THE CRITICISMS AND THE ANALYSES.

WE IN THE GOVERNMENT OF ONTARIO WANT TO ACCOMPLISH,
NOW, SOME IMPORTANT GOALS FOR OUR PEOPLE.

WE WANT TO REINFORCE OUR "SILICON VALLEY" HERE
JUST OUTSIDE OF OTTAWA.

WE WANT TO TARGET EFFECTIVELY THOSE AREAS WITHIN
THAT SECTOR THROUGH WHICH CANADA CAN ACHIEVE WORLD
LEADERSHIP.

WE DO NOT WANT TO LEAVE OUR MICROELECTRONIC FUTURE
IN THE HANDS OF OUR FOREIGN COMPETITORS.

WE WANT TO ATTRACT, AND TRAIN, AND KEEP THE BEST
TECHNICIANS AND TECHNOLOGISTS; SCIENTISTS AND ENGINEERS.

WE WANT TO GIVE THEM THE OPPORTUNITY, THE SUPPORT
AND THE SECURITY TO FOCUS THEIR EFFORTS WHERE THEY WILL
BE MOST EFFECTIVE FOR THE CANADIAN ECONOMY.

WE WANT TO ENSURE THAT MICROELECTRONIC TECHNOLOGY IS APPLIED TO OUR INDUSTRY AND ADOPTED BY OUR MANUFACTURERS BEFORE -- NOT AFTER -- THEIR FOREIGN COMPETITORS.

WE WANT TO BE READY FOR THE SOCIAL, EDUCATIONAL AND EMOTIONAL IMPACT OF THESE DEVELOPMENTS.

AND FINALLY, WE WANT TO URGE ALL GOVERNMENTS TO MOVE NOW.

WE WANT TO URGE THE FIRMS AND PEOPLE INVOLVED TO GET DOWN TO THE SPECIFICS AND MAKE SOME DIFFICULT CHOICES.

THE GOAL OF GOVERNMENTS, TAXPAYERS AND OUR INDUSTRY MUST BE SPECIFIC. SEEKING NUMERICAL TARGETS FOR GENERAL R&D IS NOT AS IMPORTANT AS OBTAINING PRACTICAL R&D -- R&D WHICH IS APPLICABLE TO CURRENT CANADIAN INDUSTRY AND ACHIEVABLE FOR FUTURE CANADIAN INDUSTRY.

WE WANT NOT TO SALVE OUR CONSCIENCES OR APPEAR TO BE ADDRESSING THE POLITICS OF BATTLING FOR INNOVATION OR NEW TECHNOLOGY.

WE WANT TO MOVE TO SOLVE THE PROBLEMS AS QUICKLY, PRACTICABLY AND EFFECTIVELY AS POSSIBLE.

IN OTHER WORDS, THE GENERAL STORY -- THE IMPORTANCE OF MICROELECTRONICS IS SOLD AND KNOWN. THE SPECIFIC WAYS TO STRENGTHEN THE INDUSTRY ARE STILL UNCERTAIN.

I WAS DISAPPOINTED, BUT NOT SURPRISED, TO READ IN THE TORONTO STAR THAT THE FEDERAL REPRESENTATIVE AT THE FINANCIAL POST CONFERENCE ON R&D AND HIGH TECHNOLOGY SAID, "THE FEDERAL GOVERNMENT WILL NOT BE IN A POSITION TO RESPOND FINANCIALLY IN ANYTHING LIKE THE AMOUNTS REQUIRED BY HIGH TECHNOLOGY INDUSTRIES IN THE 1980'S AND 1990'S.

BUT WE MUST NOT BE DISTRESSED. TO BE FAIR, THEY ARE, I THINK, COMMITTED TO THE TASK BUT STRAPPED BY FISCAL PROBLEMS -- LARGELY OF THEIR OWN MAKING.

WHAT THIS DOES IS EMPHASIZE EVEN MORE CLEARLY THE NEED FOR THE INDUSTRY TO TAKE ONE QUICK BUT FIRM PAUSE -- A STEP BACK -- NOT TO HESITATE, BUT TO ANALYSE EXACTLY WHAT KIND, STYLE AND TYPE OF ASSISTANCE IS NECESSARY, AND HELP US TO ANTICIPATE SOME OF THE SOCIAL IMPACTS.

HENCE, OUR TASK FORCE ON MICROELECTRONICS.
AS YOU KNOW, THE TASK FORCE WAS ESTABLISHED EARLIER
THIS YEAR TO ASSIST US IN ADDRESSING SOME OF THE
ECONOMIC, SOCIAL AND INDUSTRIAL IMPLICATIONS OF THE
MICROELECTRONIC "REVOLUTION" AHEAD.

THE SPECIFIC MANDATE OF THE TASK FORCE WILL BE:

- * TO IDENTIFY OPPORTUNITIES FOR RESEARCH AND
DEVELOPMENT IN MICROELECTRONICS TECHNOLOGY;
- * TO DEFINE PROBLEMS AND OPPORTUNITIES IN BOTH
THE SOFTWARE AND HARDWARE SECTORS OF THE
MICROELECTRONICS INDUSTRY;
- * TO EXAMINE CURRENT AND FUTURE APPLICATIONS OF
MICROELECTRONICS; AND
- * TO ASSESS THE PROBABLE IMPACT ON SOCIETY --
BOTH BENEFICIAL AND DETRIMENTAL.

AFTER CONSIDERATION OF THESE ISSUES, A DETAILED REPORT WILL BE PREPARED. THAT REPORT WILL OUTLINE GUIDELINES AND PRESENT SPECIFIC POLICY RECOMMENDATIONS FOR THE INVOLVEMENT OF THE ONTARIO GOVERNMENT.

THIS AFTERNOON, I WOULD LIKE TO ANNOUNCE FORMALLY THE MEMBERS OF THE TASK FORCE.

SEVEN DISTINGUISHED AND HIGHLY QUALIFIED INDIVIDUALS REPRESENTING INDUSTRY, LABOUR, GOVERNMENT AND ACADEMIA HAVE AGREED TO SERVE UNDER THE CHAIRMANSHIP OF DR. DONALD CHISHOLM, EXECUTIVE VICE-PRESIDENT OF NORTHERN TELECOM.

THOSE SEVEN PEOPLE ARE:

* MR. ROBERT J. BUTLER, SECRETARY OF THE ONTARIO GOVERNMENT'S MANAGEMENT BOARD OF CABINET;

* MR. DES CUNNINGHAM, CHAIRMAN OF GANDALF LTD.;

* MR. GLEN PATTINSON, PRESIDENT OF THE CANADIAN DISTRICT OF IUE;

* MR. TOM SAVAGE, PRESIDENT OF ITT CANADA LTD.;

* PROFESSOR K.C. SMITH, CHAIRMAN OF THE DEPARTMENT OF ELECTRICAL ENGINEERING, UNIVERSITY OF TORONTO;

* MR. IAN SHARP, PRESIDENT OF I.P. SHARP ASSOCIATES; AND

* MR. MIKE COWPLAND, PRESIDENT OF MITEL CORPORATION.

AT THOSE MEETINGS MR. COWPLAND IS UNABLE TO ATTEND, HE WILL BE REPRESENTED BY LES BARTON, MITEL'S VICE-PRESIDENT OF SPECIAL PROJECTS.

OFFICIALS OF MY MINISTRY WILL BE WORKING CLOSELY WITH THE MINISTRIES OF EDUCATION, COLLEGES AND UNIVERSITIES, LABOUR AND TRANSPORTATION AND COMMUNICATIONS IN PROVIDING RESEARCH SUPPORT AND ACTING AS A SECRETARIAT TO THE TASK FORCE.

WE ARE HONOURED THAT THESE DISTINGUISHED AND CAPABLE GENTLEMEN HAVE AGREED TO SERVE ON THE TASK FORCE, AND APPRECIATE THE CONTRIBUTION THEY ARE MAKING TO THIS IMPORTANT PROJECT.

IT IS COMPOSED PRIMARILY OF "BUSINESS" PEOPLE --
PEOPLE WHO UNDERSTAND:

- * THE URGENCY;
- * THE DETERMINATION OF OUR GOVERNMENT TO ASSIST;
- * THE NEED TO ASSIST EFFECTIVELY;
- * THE NEED TO ANTICIPATE (AS MUCH AS POSSIBLE)
THE IMPACTS AND POTENTIAL APPLICATIONS OF THE
MICROELECTRONIC REVOLUTION; AND
- * THE CRITICAL NEED TO USE OUR "SILICON VALLEY"
TO KEEP OUR FUTURE IN OUR OWN HANDS.

WITHOUT WISHING TO PREJUDICE THE WORK OF THE
TASK FORCE, ONE OF THE MAIN ISSUES CONFRONTING HIGH
TECH INDUSTRIES IN THE REGIONAL MUNICIPALITY OF
OTTAWA-CARLETON IS THE AVAILABILITY OF SKILLED LABOUR.

THE GROWTH OF HIGH TECH INDUSTRY DURING THE PAST FIVE TO TEN YEARS HAS BEEN NOTHING SHORT OF PHENOMENAL.

GROWTH RATES OF MEMBER COMPANIES IN THE CANADIAN ADVANCED TECHNOLOGY ASSOCIATION WERE IN THE RANGE OF 50 TO 75 PER CENT FOR 1979 ALONE.

IN THE HIGHLY COMPETITIVE FIELD OF WORD PROCESSING, AES HAD SALES OF OVER \$125 MILLION LAST YEAR.

GANDALF DATA LTD., FOUNDED IN 1970, HAD TOTAL SALES OF ABOUT \$34 MILLION IN 1979, AND NOW EMPLOYS 475 PEOPLE WORLDWIDE.

LINEAR TECHNOLOGY INC., WHICH DESIGNS AND MANUFACTURES SPECIALIZED SILICON CHIPS FOR HEARING AIDS, NOW EXPORTS 90 PER CENT OF ITS PRODUCTION.

MITEL CORPORATION, WHICH PRODUCES SEMI-CONDUCTORS AND TELECOMMUNICATIONS EQUIPMENT, HAD SALES OF OVER \$40 MILLION LAST YEAR, AND NOW EMPLOYS OVER 1,000 PEOPLE THROUGHOUT CANADA, THE UNITED STATES AND EUROPE.

NORTHERN TELECOM, WHICH HAS BEEN SETTING WORLD STANDARDS FOR TELECOMMUNICATIONS EQUIPMENT AND SYSTEMS, NOW EMPLOYS 33,000 PEOPLE WORLD-WIDE.

THE MOST PROFITABLE INDUSTRIAL ENTERPRISES AND THOSE ENJOYING THE MOST RAPID GROWTH WORLD-WIDE, ARE THOSE WHICH ARE CHARACTERIZED BY HIGH SKILL INTENSIVE TECHNOLOGY IN THEIR WORK FORCE.

INNOVATION-INTENSIVE INDUSTRIES HAVE CONSISTENTLY OUTPERFORMED MANUFACTURING GENERALLY IN TERMS OF EMPLOYMENT, THE VALUE OF OUTPUT, PRODUCTIVITY IMPROVEMENTS AND PRICE COMPETITIVENESS.

IT IS RECOGNIZED THAT THE SUCCESS OF THESE FIRMS CAN HAVE ENORMOUS SPINOFFS FOR THE ECONOMY OF ONTARIO -- NOT ONLY IN THE TAX REVENUES AND HIGH SKILL JOBS PROVIDED, BUT ALSO IN THE LONGER TERM TECHNOLOGICAL AND INDUSTRIAL BENEFITS THAT CAN ACCRUE.

I DO NOT WANT TO SEE THAT GROWTH IMPEDED BY A LACK OF SKILLED INDIVIDUALS.

IN A SURVEY CONDUCTED BY THE OTTAWA OFFICE OF MY MINISTRY, 68 PER CENT OF THE FIRMS INTERVIEWED INDICATED THAT THEY EXPERIENCE DIFFICULTY IN FILLING EMPLOYMENT REQUIREMENTS.

AT A TIME OF HIGH UNEMPLOYMENT, IT IS ENCOURAGING TO HEAR THAT HIGH TECH COMPANIES IN THE NATIONAL CAPITAL AREA WILL REQUIRE 4,000 TO 5,000 NEW HIGH TECHNOLOGY RECRUITS OVER THE NEXT FIVE YEARS.

IT HAS BEEN ESTIMATED THAT OF THE 80 HIGH TECHNOLOGY COMPANIES OPERATING IN THE OTTAWA-CARLETON REGION, EMPLOYMENT MAY INCREASE FROM THE CURRENT 15,000 TO OVER 100,000 BY THE END OF THE EIGHTIES.

AS ILLUSTRATED EARLIER TODAY, BY 1985 THE DEMAND FOR ELECTRICAL ENGINEERS ALONE WILL INCREASE BY 257 PER CENT. THE DEMAND FOR TECHNICIANS WILL INCREASE BY 340 PER CENT; FOR TECHNOLOGISTS BY 168 PER CENT; AND FOR ASSEMBLERS BY 297 PER CENT.

DR. CHISHOLM MENTIONED RECENTLY THAT IN THE OTTAWA AREA, SKILLED EMPLOYEES ARE IN SUCH HIGH DEMAND THAT IT IS IMPOSSIBLE TO KEEP THEM FOR ANY REASONABLE LENGTH OF TIME.

THE WHOLE ISSUE OF MATCHING SKILLS TO DEMAND IN A HIGH GROWTH, DYNAMIC INDUSTRY IS A VERY DIFFICULT ONE. THE VERY EXISTENCE -- LET ALONE PHENOMENAL GROWTH -- OF YOUR INDUSTRY WAS NOT ANTICIPATED TEN YEARS AGO.

CONSEQUENTLY, WHILE IN 1970 4.4 PER CENT OF ALL THOSE GRADUATING FROM ONTARIO UNIVERSITIES OBTAINED DEGREES IN EITHER ENGINEERING OR APPLIED SCIENCE, THAT FIGURE DROPPED TO 3.6 PER CENT BY 1978.

IN OUR "FREE CHOICE" SOCIETY, MORE AND MORE YOUNG PEOPLE ENTERED "PAPER PROFESSIONS" SUCH AS ACCOUNTING, LAW AND ADMINISTRATION.

JAPAN, ON THE OTHER HAND -- A COUNTRY WHICH HAS BEEN PREPARING FOR THE MICROELECTRONIC REVOLUTION FOR OVER A DECADE -- ALREADY HAS FIVE TIMES AS MANY SCIENTISTS AND ENGINEERS PER CAPITA AS HAVE THE UNITED STATES AND CANADA.

YET, DUE TO YOUR INGENUITY, WE HAVE IN THIS COUNTRY THE NUCLEUS OF A VITAL, DYNAMIC, HIGH TECHNOLOGY INDUSTRY. THE FUNDAMENTAL PRECEPT ON WHICH THIS INDUSTRY IS BASED IS KNOWLEDGE -- A RESOURCE WHICH WE POSSESS TO NO LESSER DEGREE THAN OUR COMPETITORS. THIS IS AN INVALUABLE RESOURCE -- AND ONE WHICH MUST NOT BE ALLOWED TO PERISH THROUGH LACK OF AWARENESS OR INITIATIVE.

TO DEVELOP TO OUR FULL POTENTIAL, IT IS ESSENTIAL THAT GOVERNMENT, INDUSTRY AND LABOUR WORK TOGETHER TO MAXIMIZE OUR INDUSTRIAL CAPACITY. I AM CONFIDENT THAT OUR TASK FORCE WILL DO MUCH TO ACHIEVE THAT GOAL.

WE HAVE ASKED THE MEMBERS TO COMPLETE THEIR FINAL REPORT WITHIN A YEAR -- REFLECTING BOTH THE IMPORTANCE WE PLACE ON HIGH TECHNOLOGY IN ONTARIO'S ECONOMY, AND THE URGENCY WITH WHICH WE MUST ACT.

WE HAVE ALSO INSTRUCTED THE TASK FORCE TO SUBMIT INTERIM RECOMMENDATIONS BEFORE THE DEADLINE IF MEMBERS FEEL THAT CERTAIN ISSUES REQUIRE OUR IMMEDIATE ATTENTION AND ACTION.

SINCE THE ANNOUNCEMENT OF THIS UNDERTAKING EARLIER THIS YEAR, I HAVE BEEN PERSONALLY GRATIFIED BY THE INTEREST IN AND SUPPORT OF THE PROJECT -- EXPRESSED BY BOTH THE PRIVATE AND PUBLIC SECTORS.

I ENCOURAGE YOU TO MAINTAIN THAT LEVEL OF INTEREST AND SUPPORT -- AND CONTRIBUTE TO THE DELIBERATIONS. IT IS AN EXCELLENT VEHICLE FOR YOU TO VOICE YOUR OPINIONS AND CONCERNS.

IN CLOSING, MAY I SAY THAT THE TIME HAS COME FOR US TO TAKE A LONG AND CAREFUL LOOK AT WHERE WE ARE; WHERE WE CAN GO; AND WHERE WE MUST GO.

THE TIME HAS COME FOR US TO DEVELOP INVENTIVE AND CREATIVE WAYS TO REACH OUR GOALS.

YOUR GOVERNMENTS ARE RESPONSIVE. WE SEEK CREATIVE METHODS AND MEANS TO CATALYZE THIS TREMENDOUSLY IMPORTANT INDUSTRY. BUT IT IS YOU WHO CAN BEST DESIGN THE DIRECTION AND ASSESS SOCIETY'S CHALLENGES AND CONCERNS.

THE GOVERNMENT, THE PUBLIC AND THE COUNTRY AWAIT NOT JUST YOUR DAY-TO-DAY TECHNICAL GROWTH AND EXPANSION, BUT YOUR CONSIDERED OPINIONS ABOUT THE FUTURE AND HOW WE WILL GET THERE.

